PROPOSED RULE MAKING

CR-102 (December 2017)
(Implements RCW 34.05.320)
Do NOT use for expedited rule making

Agency: Department of Ecology AO #21-04

☐ Original Notice
☐ Supplemental Notice to WSR ______
☐ Continuance of WSR ______

☐ Preproposal Statement of Inquiry was filed as WSR 21-15-095 ; or
☐ Expedited Rule Making--Proposed notice was filed as WSR ______; or
☐ Proposal is exempt under RCW 34.05.310(4) or 34.05.330(1); or
☐ Proposal is exempt under RCW ______.

Title of rule and other identifying information: (describe subject)
To implement the Transportation Fuel - Clean Fuels Program (Chapter 70A.535 RCW), Ecology is proposing rulemaking to:
• Add a new Chapter 173-424 WAC – Clean Fuels Program Rule
• Amend Chapter 173-455 WAC – Air Quality Fee Rule

For more information on this rulemaking visit: https://ecology.wa.gov/Regulations-Permits/Laws-rules-rulemaking/Rulemaking/WAC-173-424-455

Hearing location(s):

<table>
<thead>
<tr>
<th>Date</th>
<th>Time</th>
<th>Location: (be specific)</th>
<th>Comment:</th>
</tr>
</thead>
</table>
| August 23, 2022 | 10:00 a.m. | Webinar                | Presentation, question and answer session followed by the hearing. We are holding this hearing via webinar. This is an online meeting that you can attend from any computer using internet access. Join online and see instructions: https://waecy-wa.gov.zoom.us/meeting/register/tZUtduqupj0uHNcah5ZbCqZn8wL_UzQrPL20

To join by phone:
Find your local number: https://waecy-wa.gov.zoom.us/u/kbUNG9k5aw
Meeting ID: 810 1368 6463.

Date of intended adoption: November 28, 2022 (Note: This is NOT the effective date)

Submit written comments to:
Name: Rachel Assink
Address: Send US mail to:
Department of Ecology
Air Quality Program
PO Box 47600, Olympia, WA 98504-7600

Or
Send parcel delivery services to:
Department of Ecology
### Purpose of the proposal and its anticipated effects, including any changes in existing rules:

To implement Chapter 70A.535 RCW, the proposed rule:
- Establishes carbon intensity standards for transportation fuels used in Washington.
- Assigns compliance obligations to fuels with carbon intensities that exceed the standard.
- Establishes compliance methods including assigning credits to fuels that have carbon intensities below the standard.

This rulemaking also amends Chapter 173-455 WAC to establish the process for setting fees to recover the costs of developing and implementing the program.

### Reasons supporting proposal:

Transportation is the largest source of greenhouse gas (GHG) emissions in Washington, contributing about 45 percent of total GHG emissions statewide. In 2021, the Legislature passed the Transportation Fuel – Clean Fuels Program (Chapter 70A.535 RCW) to reduce emissions of GHGs and conventional air pollutants from transportation and to spur economic development through deployment of clean fuel technology. Washington now joins California, Oregon, and British Columbia, which already have similar clean (low carbon) fuel programs.

The law directs Ecology to adopt rules establishing the Clean Fuels Program by January 1, 2023. The program must reduce the carbon intensity of transportation fuels used in Washington by 20 percent below 2017 levels by 2038. Carbon intensity accounts for GHG emissions throughout the full life cycle of the fuel (i.e., GHG emissions from feedstock production and transport, fuel production and transport, and use of the fuel) per unit energy of the fuel.

The law also allows Ecology to charge fees to recover the direct and indirect costs of developing and implementing the program, including the associated fuel supply forecasting work of the Washington Department of Commerce.

### Statutory authority for adoption:

Chapter 70A.535 RCW, Transportation Fuel—Clean Fuels Program

### Statute being implemented:

Chapter 70A.535 RCW, Transportation Fuel—Clean Fuels Program

### Is rule necessary because of a:

| Federal Law? | Yes | No |
| Federal Court Decision? | Yes | No |
| State Court Decision? | Yes | No |

If yes, CITATION:

### Agency comments or recommendations, if any, as to statutory language, implementation, enforcement, and fiscal matters:

N/A

### Name of proponent:

(person or organization) Department of Ecology

☐ Private
☐ Public
☒ Governmental
Is a school district fiscal impact statement required under RCW 28A.305.135?  ☒ Yes  ☐ No

The public may obtain a copy of the school district fiscal impact statement by contacting:
Name: N/A
Address: N/A
Phone: N/A
Fax: N/A
TTY: N/A
Email: N/A
Other: N/A

Is a cost-benefit analysis required under RCW 34.05.328?
☒ Yes: A preliminary cost-benefit analysis may be obtained by contacting:
Name: Rachel Assink
Address: Department of Ecology
Air Quality Program
P.O. Box 47600
Olympia, WA 98504-7600
Phone: 425-531-3444
Fax: N/A
TTY: For Washington Relay Service or TTY call 711 or 877-833-6341
Email: rachel.assink@ecy.wa.gov
Other: N/A
☐ No: Please explain:

Regulatory Fairness Act Cost Considerations for a Small Business Economic Impact Statement:
This rule proposal, or portions of the proposal, may be exempt from requirements of the Regulatory Fairness Act (see chapter 19.85 RCW). Please check the box for any applicable exemption(s):
☒ This rule proposal, or portions of the proposal, is exempt under RCW 19.85.061 because this rule making is being adopted solely to conform and/or comply with federal statute or regulations. Please cite the specific federal statute or regulation this rule is being adopted to conform or comply with, and describe the consequences to the state if the rule is not adopted.
Citation and description:
☐ This rule proposal, or portions of the proposal, is exempt because the agency has completed the pilot rule process defined by RCW 34.05.313 before filing the notice of this proposed rule.
☐ This rule proposal, or portions of the proposal, is exempt under the provisions of RCW 15.65.570(2) because it was adopted by a referendum.
☐ This rule proposal, or portions of the proposal, is exempt under RCW 19.85.025(3). Check all that apply:
☐ RCW 34.05.310 (4)(b)  ☐ RCW 34.05.310 (4)(e)
(Internal government operations)  (Dictated by statute)
☐ RCW 34.05.310 (4)(c)  ☐ RCW 34.05.310 (4)(f)
(Incorporation by reference)  (Set or adjust fees)
☐ RCW 34.05.310 (4)(d)  ☐ RCW 34.05.310 (4)(g)
(Correct or clarify language)  ((i) Relating to agency hearings; or (ii) process requirements for applying to an agency for a license or permit)
☒ This rule proposal, or portions of the proposal, is exempt under RCW 19.85.025(4).
Explanation of exemptions, if necessary:
The analyses required under the RFA, and their inclusion in a Small Business Economic Impact Statement, are based on whether the proposed rule would impose compliance costs on small businesses. A rule is otherwise exempt from these analyses under RCW 19.85.025(4).

Based on available information, we did not identify any small businesses that would have credit deficits under the proposed rule. These known transportation fuel suppliers and electric utilities include only:

- Large businesses themselves, or part of larger businesses, averaging 8,857 employees.
- Publicly owned.

However, we do not have full information concerning all potential entities incurring any kind of direct compliance cost under the proposed rule. Specifically, we do not have comprehensive information about all potential credit generators that could opt into the program.

While we may be able to make some assumptions about opt-in entities, we cannot be certain of all their attributes, and about whether any are small businesses. Due to uncertainty about the employment attributes of opt-in entities, we chose to complete the analyses required under the RFA, to fully understand potential disproportion in the impacts of the proposed rule.

Opt-in entities would incur compliance costs related to registration and reporting. We note, however, that opt-in entities are not likely to opt in unless they expect a private net benefit, i.e., the costs they incur complying with the proposed rule’s registration and reporting requirements are outweighed by the benefits of generating and selling credits.

As the RFA requires analyses specifically related to employment impacts and price or output impacts (as they play into revenue and profits), we also determined this analysis would be the most appropriate space to discuss additional modeling performed to fully understand the potential impacts of the proposed rule.

COMPLETE THIS SECTION ONLY IF NO EXEMPTION APPLIES

If the proposed rule is not exempt, does it impose more-than-minor costs (as defined by RCW 19.85.020(2)) on businesses?

☐ No  Briefly summarize the agency's analysis showing how costs were calculated. ______

☒ Yes  Calculations show the rule proposal likely imposes more-than-minor cost to businesses, and a small business economic impact statement is required. Insert statement here:

WA Department of Ecology
Small Business Economic Impact Statement:
Relevant Information for State Register Publication

Proposed WAC 173-424 Clean Fuels Program Rule

This Small Business Economic Impact Statement (SBEIS) presents the:

- Compliance requirements of the proposed rule.
- Results of the analysis of relative compliance cost burden.
- Consideration of lost sales or revenue.
- Cost-mitigating action taken by Ecology, if required.
- Small business and local government consultation.
- Industries likely impacted by the proposed rule.
- Expected net impact on jobs statewide.

A small business is defined by the Regulatory Fairness Act (chapter 19.85 RCW) as having 50 or fewer employees. Estimated costs are determined as compared to the existing regulatory environment—the regulations in the absence of the rule. The SBEIS only considers costs to “businesses in an industry” in Washington State. This means that impacts, for this document, are not evaluated for government agencies.

The existing regulatory environment is called the “baseline” in this document. It includes only existing laws and rules at federal and state levels.

This information is excerpted from Ecology’s complete set of regulatory analyses of the proposed rule. For complete discussion of the likely costs, benefits, minimum compliance burden, and relative burden on small businesses, see the Regulatory Analyses (Ecology publication no. 22-02-029, July 2022)
CHOICE TO COMPLETE AN SBEIS
The analyses required under the RFA, and their inclusion in a Small Business Economic Impact Statement, are based on whether the proposed rule would impose compliance costs on small businesses. A rule is otherwise exempt from these analyses under RCW 19.85.025(4).
Based on available information, we did not identify any small businesses that would have credit deficits under the proposed rule. These known transportation fuel suppliers and electric utilities include only:
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However, we do not have full information concerning all potential entities incurring any kind of direct compliance cost under the proposed rule. Specifically, we do not have comprehensive information about all potential credit generators that could opt into the program.
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As the RFA requires analyses specifically related to employment impacts and price or output impacts (as they play into revenue and profits), we also determined this analysis would be the most appropriate space to discuss additional modeling performed to fully understand the potential impacts of the proposed rule.

COMPLIANCE REQUIREMENTS OF THE PROPOSED RULE, INCLUDING PROFESSIONAL SERVICES

Baseline
The baseline for our analyses generally consists of existing rules and laws, and their requirements. This is what allows us to make a consistent comparison between the state of the world with and without the proposed rule.
For this analysis, the baseline includes:
- Chapter 70A.535 RCW, Transportation Fuel – Clean Fuels Program.
- Chapter 70A.30 RCW, Motor Vehicle Emission Standards.
- Chapter 70A.45 RCW, Limiting Greenhouse Gas Emissions.
- Chapter 173-455 WAC, Air Quality Fee Rule.

Proposed
The proposed rule would establish:
- Definitions specific to the Clean Fuels Program.
- Applicability and exemptions for fuels.
- General requirements for regulated parties, opt-in entities, and credit aggregators.
- Identification of first fuel reporting entities, subsequent reporting entities, and credit or deficit generators, for:
  - Liquid fuels.
  - Gaseous fuels.
  - Electricity.
  - The backstop aggregator.
- Registration requirements.
- Recordkeeping requirements.
- Reporting requirements.
- Credit and deficit generation procedures.
- Credit transaction procedures.
- Required calculation methods for credits and deficits.
- How compliance must be demonstrated.
- A credit clearance market.
- Advance credit procedures.
- Credit generation methods for zero-emission vehicle (ZEV) infrastructure.
- Carbon intensity calculations and procedures.
- Authority to suspend, revoke, or modify accounts, carbon intensities, or credits.
- Public disclosure requirements.
- Emergency deferral procedures in the event of a fuels shortage.
- Forecast deferral procedures.
- Validation and verification requirements.
Proposed amendments to the fee rule would:
- Set the procedure for determining Clean Fuels Program fees based on workload.

**COSTS OF COMPLIANCE: EQUIPMENT**
"Compliance with the proposed rule, compared to the baseline, is not likely to impose additional costs of equipment beyond those underlying costs of reducing carbon intensity of transportation fuels in the state (see Costs of Compliance: Other, below).

**COSTS OF COMPLIANCE: SUPPLIES**
Compliance with the proposed rule, compared to the baseline, is not likely to impose additional costs of supplies beyond those underlying costs of reducing carbon intensity of transportation fuels in the state (see Costs of Compliance: Other, below).

**COSTS OF COMPLIANCE: LABOR**
Compliance with the proposed rule, compared to the baseline, is not likely to impose additional costs of labor beyond those underlying costs of reducing carbon intensity of transportation fuels in the state (see Costs of Compliance: Other, below).

**COSTS OF COMPLIANCE: PROFESSIONAL SERVICES**
Compliance with the proposed rule, compared to the baseline, is not likely to impose additional costs of professional services beyond those underlying costs of reducing carbon intensity of transportation fuels in the state (see Costs of Compliance: Other, below).

**COSTS OF COMPLIANCE: ADMINISTRATIVE COSTS**
Where applicable, Ecology estimates administrative costs ("overhead") as part of the cost of labor and professional services, above.

**COSTS OF COMPLIANCE: OTHER**
We estimated costs associated with the Clean Fuels Program based on an analysis performed by Berkeley Research Group ("BRG"; BRG Energy & Climate, 2022. Washington Department of Ecology Clean Fuel Standard Cost Benefit Analysis Report. May 12, 2022. [https://ecology.wa.gov/DOE/files/22/22790fe6-fc3a-414d-b3ba-036af0975258.pdf](https://ecology.wa.gov/DOE/files/22/22790fe6-fc3a-414d-b3ba-036af0975258.pdf)) in compliance with the authorizing statute (Chapter 70A.535 RCW). The BRG analysis estimated the costs and benefits of the Clean Fuels Program. The baseline for the BRG analysis is the same as for this Preliminary Regulatory Analysis. The report presented costs per gallon of gas and diesel, and we converted these to overall costs using supporting modeling data provided by BRG.

The BRG analysis focused on two scenarios:
- Least cost: A least-cost approach to achieving the required 20 percent reduction by 2038, for entities required to comply. This scenario does not correspond to the proposed rule.
- Accelerated reduction: A least cost approach to achieving the required 20 percent reduction by 2034, reducing average carbon intensity by a full 10 percent in 2034. The Accelerated Reduction scenario aligns with the requirements of the proposed rule.

Under the Accelerated Reduction scenario, BRG found the following costs per gallon equivalent of transportation fuels.

<table>
<thead>
<tr>
<th>Year</th>
<th>Consumer Gasoline</th>
<th>Consumer Diesel</th>
</tr>
</thead>
<tbody>
<tr>
<td>2023</td>
<td>0.007</td>
<td>(0.016)</td>
</tr>
<tr>
<td>2024</td>
<td>0.017</td>
<td>(0.006)</td>
</tr>
<tr>
<td>2025</td>
<td>0.036</td>
<td>0.014</td>
</tr>
<tr>
<td>2026</td>
<td>0.056</td>
<td>0.034</td>
</tr>
<tr>
<td>2027</td>
<td>0.076</td>
<td>0.054</td>
</tr>
<tr>
<td>2028</td>
<td>0.105</td>
<td>0.083</td>
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<tr>
<td>2029</td>
<td>0.134</td>
<td>0.113</td>
</tr>
<tr>
<td>2030</td>
<td>0.164</td>
<td>0.142</td>
</tr>
</tbody>
</table>

**Impacts of Accelerated Reduction scenario on consumer fuel prices, 2020$/GGE**
2031 | 0.193 | 0.171
---|---|---
2032 | 0.193 | 0.171
2033 | 0.193 | 0.170
2034 | 0.389 | 0.368
2035 | 0.389 | 0.367
2036 | 0.389 | 0.366
2037 | 0.005 | 0.005
2038 | 0.005 | 0.005

(Source: BRG)

**Impacts of Accelerated Reduction scenario on non-consumer fuel prices, 2020$/GGE**

<table>
<thead>
<tr>
<th>Year</th>
<th>Unblended Gasoline</th>
<th>Ethanol</th>
<th>Renewable Naphtha</th>
<th>Electric</th>
<th>Fossil Diesel</th>
<th>Biodiesel</th>
<th>Renewable Diesel</th>
<th>Hydrogen</th>
<th>CNG</th>
<th>RNG</th>
<th>Propane</th>
<th>Renewable Propane</th>
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</thead>
<tbody>
<tr>
<td>2023</td>
<td>0.045</td>
<td>(0.430)</td>
<td>(0.658)</td>
<td>(1.833)</td>
<td>0.031</td>
<td>(0.869)</td>
<td>(0.951)</td>
<td>0.504</td>
<td>(0.634)</td>
<td>(0.459)</td>
<td>(0.686)</td>
<td></td>
</tr>
<tr>
<td>2024</td>
<td>0.055</td>
<td>(0.420)</td>
<td>(0.648)</td>
<td>(1.840)</td>
<td>0.041</td>
<td>(0.859)</td>
<td>(0.941)</td>
<td>(0.728)</td>
<td>(0.359)</td>
<td>(0.624)</td>
<td>(0.449)</td>
<td>(0.676)</td>
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<tr>
<td>2025</td>
<td>0.075</td>
<td>(0.401)</td>
<td>(0.629)</td>
<td>(1.837)</td>
<td>0.061</td>
<td>(0.839)</td>
<td>(0.921)</td>
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<td>(0.339)</td>
<td>(0.604)</td>
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<td>2026</td>
<td>0.094</td>
<td>(0.381)</td>
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<td>(0.901)</td>
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<td>2027</td>
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<td>(0.881)</td>
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<td>(0.299)</td>
<td>(0.564)</td>
<td>(0.390)</td>
<td>(0.617)</td>
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<td>2028</td>
<td>0.143</td>
<td>(0.332)</td>
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<td>(1.819)</td>
<td>0.131</td>
<td>(0.770)</td>
<td>(0.851)</td>
<td>(1.879)</td>
<td>(0.269)</td>
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<td>(0.360)</td>
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<tr>
<td>2029</td>
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<td>(0.303)</td>
<td>(0.531)</td>
<td>(1.806)</td>
<td>0.160</td>
<td>(0.740)</td>
<td>(0.821)</td>
<td>(1.850)</td>
<td>(0.239)</td>
<td>(0.504)</td>
<td>(0.330)</td>
<td>(0.557)</td>
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<tr>
<td>2030</td>
<td>0.202</td>
<td>(0.273)</td>
<td>(0.501)</td>
<td>(1.794)</td>
<td>0.190</td>
<td>(0.710)</td>
<td>(0.791)</td>
<td>(1.820)</td>
<td>(0.209)</td>
<td>(0.474)</td>
<td>(0.300)</td>
<td>(0.527)</td>
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<td>2031</td>
<td>0.231</td>
<td>(0.244)</td>
<td>(0.472)</td>
<td>(1.764)</td>
<td>0.220</td>
<td>(0.680)</td>
<td>(0.762)</td>
<td>(1.790)</td>
<td>(0.180)</td>
<td>(0.445)</td>
<td>(0.270)</td>
<td>(0.497)</td>
</tr>
<tr>
<td>2032</td>
<td>0.231</td>
<td>(0.244)</td>
<td>(0.472)</td>
<td>(1.764)</td>
<td>0.220</td>
<td>(0.680)</td>
<td>(0.762)</td>
<td>(1.790)</td>
<td>(0.180)</td>
<td>(0.445)</td>
<td>(0.270)</td>
<td>(0.497)</td>
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<td>2033</td>
<td>0.231</td>
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<td>(0.472)</td>
<td>(1.764)</td>
<td>0.220</td>
<td>(0.680)</td>
<td>(0.762)</td>
<td>(1.790)</td>
<td>(0.180)</td>
<td>(0.445)</td>
<td>(0.270)</td>
<td>(0.497)</td>
</tr>
<tr>
<td>2034</td>
<td>0.427</td>
<td>(0.048)</td>
<td>(0.276)</td>
<td>(1.568)</td>
<td>0.419</td>
<td>(0.481)</td>
<td>(0.563)</td>
<td>(1.591)</td>
<td>0.019</td>
<td>(0.246)</td>
<td>(0.072)</td>
<td>(0.299)</td>
</tr>
<tr>
<td>2035</td>
<td>0.427</td>
<td>(0.048)</td>
<td>(0.276)</td>
<td>(1.568)</td>
<td>0.419</td>
<td>(0.481)</td>
<td>(0.563)</td>
<td>(1.591)</td>
<td>0.019</td>
<td>(0.246)</td>
<td>(0.072)</td>
<td>(0.299)</td>
</tr>
<tr>
<td>2036</td>
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<td>(0.048)</td>
<td>(0.276)</td>
<td>(1.568)</td>
<td>0.419</td>
<td>(0.481)</td>
<td>(0.563)</td>
<td>(1.591)</td>
<td>0.019</td>
<td>(0.246)</td>
<td>(0.072)</td>
<td>(0.299)</td>
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<tr>
<td>2037</td>
<td>0.005</td>
<td>(0.001)</td>
<td>(0.004)</td>
<td>(0.020)</td>
<td>0.005</td>
<td>(0.006)</td>
<td>(0.007)</td>
<td>(0.020)</td>
<td>0.000</td>
<td>(0.003)</td>
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<td>(0.004)</td>
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<tr>
<td>2038</td>
<td>0.005</td>
<td>(0.001)</td>
<td>(0.004)</td>
<td>(0.020)</td>
<td>0.005</td>
<td>(0.006)</td>
<td>(0.007)</td>
<td>(0.020)</td>
<td>0.000</td>
<td>(0.003)</td>
<td>(0.001)</td>
<td>(0.004)</td>
</tr>
</tbody>
</table>

(Source: BRG)

**Calculations**
We multiplied these values by the fuel volumes modeled by BRG, and estimated the following total costs, cost savings, and net costs in each year of the program. A negative net cost reflects a net benefit.

**Total costs by year, billions, 2020$**

<table>
<thead>
<tr>
<th>Year</th>
<th>Costs</th>
<th>Cost Savings</th>
<th>Net Costs</th>
</tr>
</thead>
<tbody>
<tr>
<td>2023</td>
<td>$0.15</td>
<td>$0.33</td>
<td>($0.18)</td>
</tr>
<tr>
<td>2024</td>
<td>$0.18</td>
<td>$0.33</td>
<td>($0.15)</td>
</tr>
</tbody>
</table>
Ecology's Regulatory Analyses reflect streams of costs and benefits in present values. A present value reflects future values in current value, reflecting the opportunity cost of having funds later versus now. The table below summarizes the total present value costs, cost-savings, and net costs likely generated by the proposed rule.

<table>
<thead>
<tr>
<th>Year</th>
<th>Total Present Value Costs</th>
<th>Total Present Value Cost-Savings</th>
<th>Total Present Value Net Costs</th>
</tr>
</thead>
<tbody>
<tr>
<td>2025</td>
<td>$6.52</td>
<td>$3.07</td>
<td>$3.45</td>
</tr>
<tr>
<td>2026</td>
<td>$0.25</td>
<td>$0.34</td>
<td>($0.09)</td>
</tr>
<tr>
<td>2027</td>
<td>$0.32</td>
<td>$0.34</td>
<td>($0.03)</td>
</tr>
<tr>
<td>2028</td>
<td>$0.38</td>
<td>$0.35</td>
<td>$0.03</td>
</tr>
<tr>
<td>2029</td>
<td>$0.47</td>
<td>$0.36</td>
<td>$0.11</td>
</tr>
<tr>
<td>2030</td>
<td>$0.56</td>
<td>$0.38</td>
<td>$0.18</td>
</tr>
<tr>
<td>2031</td>
<td>$0.64</td>
<td>$0.21</td>
<td>$0.42</td>
</tr>
<tr>
<td>2032</td>
<td>$0.71</td>
<td>$0.20</td>
<td>$0.51</td>
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<tr>
<td>2033</td>
<td>$0.68</td>
<td>$0.20</td>
<td>$0.49</td>
</tr>
<tr>
<td>2034</td>
<td>$0.65</td>
<td>$0.19</td>
<td>$0.46</td>
</tr>
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<td>2035</td>
<td>$1.15</td>
<td>$0.12</td>
<td>$1.03</td>
</tr>
<tr>
<td>2036</td>
<td>$1.06</td>
<td>$0.12</td>
<td>$0.94</td>
</tr>
<tr>
<td>2037</td>
<td>$1.01</td>
<td>$0.08</td>
<td>$0.93</td>
</tr>
<tr>
<td>2038</td>
<td>$0.01</td>
<td>$0.00</td>
<td>$0.01</td>
</tr>
<tr>
<td>2039</td>
<td>$0.01</td>
<td>$0.00</td>
<td>$0.01</td>
</tr>
</tbody>
</table>

**Reporting costs**

We estimated reporting costs using CARB's estimated recordkeeping and reporting costs for the California Low Carbon Fuel Standard. CARB estimated annual costs of $216,658 per reporting entity (converted to 2020-dollars). We identified 26 transportation fuel suppliers potentially required to comply with the proposed rule. If all 26 of these suppliers incur reporting costs, they would pay a total of $5.6 million per year. We also identified up to 60 electric utilities in Washington, which would collectively incur a total of $13.0 million per year in reporting costs.

Ecology’s Regulatory Analyses reflect streams of costs and benefits in present values. A present value reflects future values in current value, reflecting the opportunity cost of having funds later versus now. The table below summarizes the total present value reporting costs estimated for the proposed rule.

<table>
<thead>
<tr>
<th>Year</th>
<th>Fuel Supplier Costs</th>
<th>Electric Utility Costs</th>
<th>Total Present Value Costs</th>
</tr>
</thead>
<tbody>
<tr>
<td>2039</td>
<td>$0.01</td>
<td>$0.01</td>
<td>$0.02</td>
</tr>
</tbody>
</table>

**COMPARISON OF COMPLIANCE COST FOR SMALL VERSUS LARGE BUSINESSES**

The average affected business likely to have a credit deficit under the proposed rule employs approximately 8,857 people, and there are no likely small businesses in this group.

For potential opt-in entities, we do not have comprehensive knowledge of their attributes or the internal business decisions. We assume, however, that opt-in entities would only choose to participate based on a positive expected private net benefit (accounting for compliance costs and the benefits of selling credits).

Therefore, overall, we conclude that no small businesses would incur net compliance costs under the proposed rule. Therefore Ecology is not required, under the RFA, to include all legal and feasible elements in the proposed rule to mitigate disproportionate costs on small businesses. Note, however, that we have voluntarily completed the additional analyses and considerations required under the RFA.

**CONSIDERATION OF LOST SALES OR REVENUE**
Businesses that would incur compliance costs under the proposed rule could experience reduced sales or revenues if the proposed rule significantly affects the prices of the goods they sell. The degree to which this could happen is strongly related to each business’s production and pricing model (whether additional lump-sum costs would significantly affect marginal costs), as well as the specific attributes of the markets in which they sell goods, including the degree of influence each firm has on market prices, as well as the relative responsiveness of market demand to price changes.

BRG estimated the following impacts to consumer prices, based on an assumed full pass-through of producer, wholesaler, or retailer costs to consumers.

**Policy impacts of Accelerated Reduction scenario on consumer fuel prices, 2020$/GGE**

<table>
<thead>
<tr>
<th>Year</th>
<th>Consumer Gasoline</th>
<th>Consumer Diesel</th>
</tr>
</thead>
<tbody>
<tr>
<td>2023</td>
<td>0.007</td>
<td>(0.016)</td>
</tr>
<tr>
<td>2024</td>
<td>0.017</td>
<td>(0.006)</td>
</tr>
<tr>
<td>2025</td>
<td>0.036</td>
<td>0.014</td>
</tr>
<tr>
<td>2026</td>
<td>0.056</td>
<td>0.034</td>
</tr>
<tr>
<td>2027</td>
<td>0.076</td>
<td>0.054</td>
</tr>
<tr>
<td>2028</td>
<td>0.105</td>
<td>0.083</td>
</tr>
<tr>
<td>2029</td>
<td>0.134</td>
<td>0.113</td>
</tr>
<tr>
<td>2030</td>
<td>0.164</td>
<td>0.142</td>
</tr>
<tr>
<td>2031</td>
<td>0.193</td>
<td>0.171</td>
</tr>
<tr>
<td>2032</td>
<td>0.193</td>
<td>0.171</td>
</tr>
<tr>
<td>2033</td>
<td>0.193</td>
<td>0.170</td>
</tr>
<tr>
<td>2034</td>
<td>0.389</td>
<td>0.368</td>
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<tr>
<td>2035</td>
<td>0.389</td>
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<td>0.366</td>
</tr>
<tr>
<td>2037</td>
<td>0.005</td>
<td>0.005</td>
</tr>
<tr>
<td>2038</td>
<td>0.005</td>
<td>0.005</td>
</tr>
</tbody>
</table>

(Source: BRG)

Based on supporting data provided by BRG, we identified that consumption of gasoline would consistently decrease over the course of the Clean Fuels Program, while consumption of fossil diesel would decrease through 2032, increasing through 2035, and decreasing again through 2038.

Considering only these impacts to fossil-based gasoline and diesel, decreases in output could outweigh increases in prices in some years, resulting in reduced revenues. Thanks to the flexibility of transportation fuel suppliers over time, however, this may not be the case. Suppliers could choose to change the types of fuel they supply and how fuels are blended, to mitigate or avoid negative impacts to fossil fuel revenues. Moreover, expanded electrification and alternative fuel production would support additional revenues to new entrants to the Washington transportation fuels sector, including utilities or businesses specializing in electric vehicle charging.

**MITIGATION OF DISPROPORTIONATE IMPACT**

The RFA (19.85.030(2) RCW) states that:

“Based upon the extent of disproportionate impact on small business identified in the statement prepared under RCW 19.85.040, the agency shall, where legal and feasible in meeting the stated objectives of the statutes upon which the rule is based, reduce the costs imposed by the rule on small businesses. The agency must consider, without limitation, each of the following methods of reducing the impact of the proposed rule on small businesses:

a) Reducing, modifying, or eliminating substantive regulatory requirements;
b) Simplifying, reducing, or eliminating recordkeeping and reporting requirements;
c) Reducing the frequency of inspections;
d) Delaying compliance timetables;
e) Reducing or modifying fine schedules for noncompliance; or
f) Any other mitigation techniques including those suggested by small businesses or small business advocates.”

Based on the absence of small businesses among likely entities with deficits under the proposed rule, and the absence of opt-in entities that would see compliance costs (rather than a benefit), Ecology is not required to consider the above options or mitigate the likely nonexistent disproportionate costs. Nonetheless, we note that during development of the proposed rule, Ecology considered alternative rule contents, and did not include the following elements in the rule because they would have imposed additional burden on covered parties:

- Compliance years: Making 2023 a full compliance year.
- GREET model: Using the most recent version of the Argonne GREET model.
- Verification: Including third party verification at the start of the program.
SMALL BUSINESS AND LOCAL GOVERNMENT CONSULTATION

We involved small businesses and local governments in its development of the proposed rule, using:

- Stakeholder meetings held 10/6/21, 11/16/21, 1/27/22, 3/15/22, 4/13/22
- Stakeholder meeting notices and meeting materials, project updates, and rule announcement notice

Attendance at stakeholder meetings included representation from the following, which includes representation of small businesses and local governments:

- Clean Fuels Alliance America
- Renewable Fuels Association
- Renewable Natural Gas Coalition
- Airlines for America
- Superior Court Judges Association
- Renewable Hydrogen Alliance
- Pacific Merchant Shipping Association
- NW Energy Coalition
- City of Tacoma
- Port of Seattle
- City of Seattle
- King County
- Port of Kalama

NAICS CODES OF INDUSTRIES IMPACTED BY THE PROPOSED RULE

2211, Electric Power Generation, Transmission and Distribution
3241, Petroleum and Coal Products Manufacturing
3251, Basic Chemical Manufacturing
4247, Petroleum and Petroleum Products Merchant Wholesalers
4251, Wholesale Trade Agents and Brokers
4451, Grocery and Convenience Retailers
4471, Gasoline Stations
4921, Couriers and Express Delivery Services

The proposed rule may also impose compliance costs on businesses in the following industries that Ecology assumes are likely to opt into the Clean Fuels Program because they expect a net benefit from participation:

Aviation fuels manufacturing (NAICS 324110)
Electric vehicle charging companies (no current NAICS available)
Electric vehicle manufacturers (NAICS 336110)
Electric or hydrogen vehicle fleet owners (various possible NAICS)

IMPACT ON JOBS

BRG estimated the following impacts to jobs resulting from the proposed rule, as reflected in their corresponding Accelerated Reduction scenario.

Overall employment impacts

<table>
<thead>
<tr>
<th>Year</th>
<th>Indirect</th>
<th>Induced</th>
<th>Direct</th>
<th>Total Net</th>
</tr>
</thead>
<tbody>
<tr>
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<td>15</td>
<td>7</td>
<td>-5</td>
<td>17</td>
</tr>
<tr>
<td>2024</td>
<td>17</td>
<td>8</td>
<td>-5</td>
<td>20</td>
</tr>
<tr>
<td>2025</td>
<td>18</td>
<td>8</td>
<td>-4</td>
<td>22</td>
</tr>
<tr>
<td>2026</td>
<td>20</td>
<td>9</td>
<td>-4</td>
<td>25</td>
</tr>
<tr>
<td>2027</td>
<td>23</td>
<td>10</td>
<td>-3</td>
<td>30</td>
</tr>
<tr>
<td>2028</td>
<td>25</td>
<td>11</td>
<td>-2</td>
<td>34</td>
</tr>
<tr>
<td>2029</td>
<td>27</td>
<td>12</td>
<td>-2</td>
<td>37</td>
</tr>
<tr>
<td>2030</td>
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<tr>
<td>2038</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>4</td>
</tr>
</tbody>
</table>
The public may obtain a copy of the small business economic impact statement or the detailed cost calculations by contacting:

Name: Rachel Assink  
Address: Department of Ecology  
          Air Quality Program  
          P.O. Box 47600  
          Olympia, WA 98504-7600  
          Phone: 425-531-3444  
          Fax: N/A  
          TTY: For Washington Relay Service or TTY call 711 or 877-833-6341.  
          Email: rachel.assink@ecy.wa.gov  
          Other: N/A

Date: July 18, 2022  
Name: Heather Bartlett  
Title: Deputy Director

Signature: [Handwritten Signature]